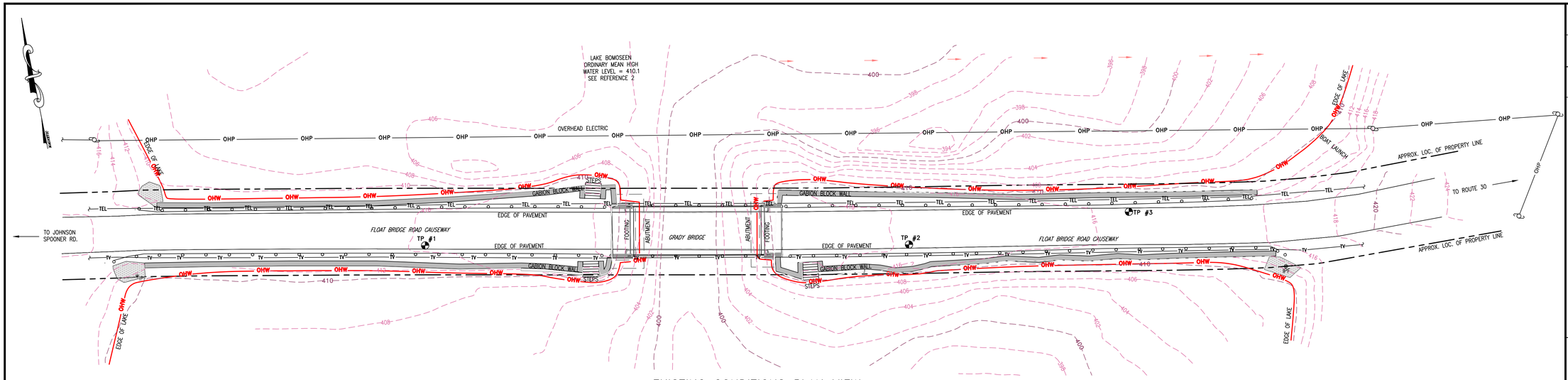
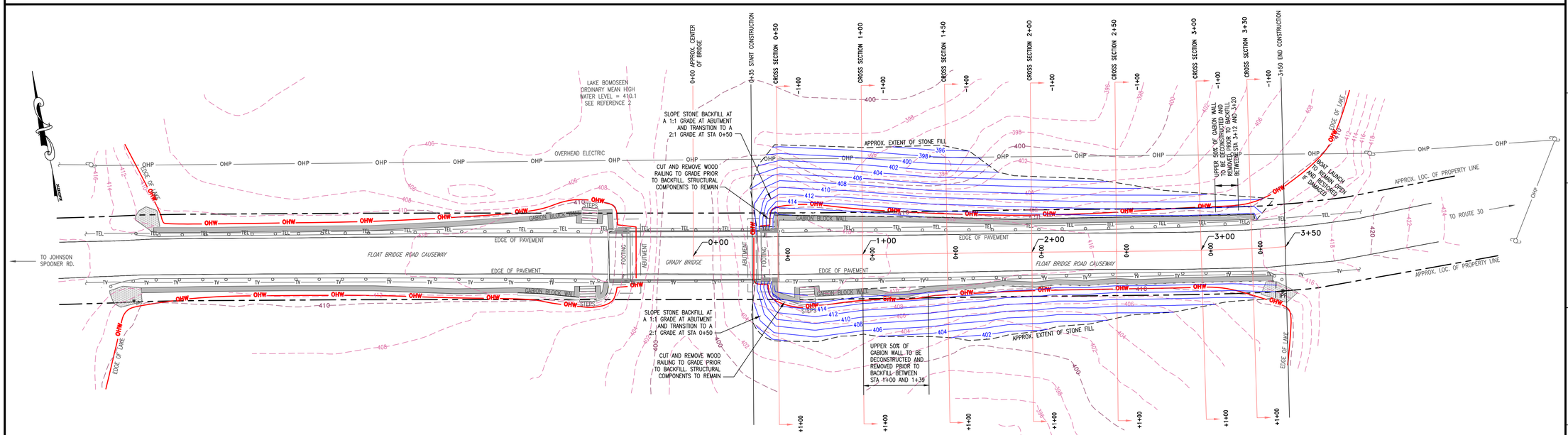


EXISTING CONDITIONS PLAN VIEW

SCALE: 1"=30'



PROPOSED SITE PLAN VIEW

SCALE: 1"=30'

REFERENCES:

1. TOPOGRAPHIC AND PLANIMETRIC SURVEY CONDUCTED ON OCTOBER 26, 2011 AND FEBRUARY 14, 2012 BY ENMAN KESSELRING CONSULTING ENGINEERS, P.C. USING A NIKON NIVO 5M ELECTRONIC TOTAL STATION.
2. VERTICAL DATUM IS NGVD 29. THE ORDINARY MEAN HIGH WATER LEVEL FOR OCOTBER 2010 TO SEPTEMBER 2011 WAS 410.1 FROM USGS GAGE DATA.
3. TEST PITS OBSERVED AND INFORMATION RECORDED BY M & W SOILS ENGINEERING, INC ON JUNE 18, 2012 AND JUNE 28, 2012.
4. HORIZONTAL LOCATION OF BURIED UTILITIES AS PROVIDED BY OWNERS AND IS APPROXIMATE. VERTICAL LOCATION IS UNKNOWN.
5. THE PROPERTY LINES, EASEMENTS, AND OTHER REAL PROPERTY DESCRIPTIONS PROVIDED IN THIS PERMIT APPLICATION ARE FOR THE USE OF LOCAL, STATE, AND FEDERAL PERMIT PROGRAMS ONLY. THEY DO NOT DEFINE LEGAL RIGHTS OR MEET LEGAL REQUIREMENTS FOR A LAND SURVEY AS DESCRIBED IN 26 V.S.A. SUBSECTION 2502(4), AND SHALL NOT BE USED IN LIEU OF A SURVEY AS THE BASIS OF ANY LAND TRANSFER OR ESTABLISHMENT OF ANY PROPERTY RIGHT.

GENERAL NOTES

1. UTILITY LOCATIONS ARE APPROXIMATE. CONTRACTOR TO CONTACT DIG SAFE FOR UTILITY MARKOUT PRIOR TO ANY SITEWORK. THE FOLLOWING IS CONTACT INFORMATION FOR LOCAL UTILITIES. CONTRACTOR TO VERIFY AS ALL INFORMATION IS SUBJECT TO CHANGE:
   A. GREEN MOUNTAIN POWER – (888) 835–4672
   B. COMCAST – STEVE MARSHALL (603) 657–4677
   C. OTT COMMUNICATIONS (FORMERLY SHOREHAM TELEPHONE) – JASON PRESSLEY (207) 688–8451
2. THE WORK IS SUBJECT TO ALL APPLICABLE PERMITS. CONTRACTOR TO CONFORM TO ALL REQUIREMENTS OF THE PERMITS, INCLUDING REPORTING REQUIREMENTS. THESE INCLUDE BUT MAY NOT BE LIMITED TO:
   A. THE ENCROACHMENT PERMIT ISSUED BY THE VERMONT LAKES AND PONDS SECTION
   B. THE GENERAL PERMIT ISSUED BY THE ARMY CORPS OF ENGINEERS
   C. THE CONSTRUCTION GENERAL PERMIT ISSUED BY THE VERMONT STORMWATER SECTION.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING THE STATE OF VERMONT LOW RISK SITE HANDBOOK FOR EROSION CONTROL MEASURES.
4. CONTRACTOR TO REMOVE ALL VEGETATION AT BASE OF GABION WALLS TO GRADE PRIOR TO GEOTEXTILE INSTALLATION.
5. ACCESS NEEDS TO BE MAINTAINED FOR RESIDENTS AND EMERGENCY VEHICLES. WORK SHALL BE CONFINED TO ONE LANE OF ROADWAY WHILE THE OTHER LANE IS OPEN TO TRAFFIC. A TRAFFIC SIGNAL SHALL BE INSTALLED TO CONTROL TRAFFIC WHEN ONE LANE IS CLOSED. CONTRACTOR IS RESPONSIBLE FOR ALL TRAFFIC AND SAFETY.
6. UTILITIES NEED TO BE MAINTAINED FOR RESIDENTS.
7. WHERE GUARDRAIL MAY BE TEMPORARILY REMOVED, TEMPORARY JERSEY TYPE BARRIERS MUST BE PLACED FOR SAFETY.
8. THE CONTRACTOR IS RESPONSIBLE TO FURNISH ALL LABOR, MATERIALS AND EQUIPMENT TO COMPLETE THE PROJECT SITE WORK AS SHOWN ON THIS PLAN. FOLLOWING CONSTRUCTION THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ENMAN KESSELRING CONSULTING ENGINEERS WITH RECORD INFORMATION.

LEGEND

OHW	ORDINARY HIGH WATER
	APPROX. LOCATION OF PROPERTY LINE
98	EXISTING CONTOUR
100	EXISTING 10' CONTOUR
	EXISTING GUARDRAIL
OHP	EXISTING OVERHEAD POWER
TV	EXISTING BURIED TV LINE
TEL	EXISTING BURIED TELEPHONE LINE
	EXISTING UTILITY POLE
98	PROPOSED CONTOUR
100	PROPOSED 10' CONTOUR
	APPROX EXTENT OF STONE FILL

SUGGESTED CONSTRUCTION SEQUENCING:

AN ALTERNATE CONSTRUCTION SEQUENCE MAY BE PROPOSED BY THE CONTRACTOR TO ENGINEER FOLLOWING THE BID.

1. INSTALL TRAFFIC CONTROLS AND REDUCE ROADWAY TO ONE LANE OF TRAVEL WITH TRAFFIC BARRIERS AS NECESSARY.
2. INSTALL EROSION CONTROLS, INCLUDING FLOATING TURBIDITY CURTAIN.
3. CUT AND REMOVE ALL VEGETATION ALONG GABION WALLLS.
4. INSTALL GEOTEXTILE ALONG LAKE BOTTOM.
5. INSTALL 24"–36" BLAST ROCK FILL.
6. REMOVE TRAFFIC BARRIERS AND ALTERNATE TRAFFIC TO FINISHED SIDE AND BEGIN CONSTRUCTION ON OPPOSITE LANE.
7. INSTALL PAVEMENT OVERLAY. (ALTERNATE)
8. REPAIR ALL DISTURBED AND DAMAGED AREAS.
9. REMOVE TRAFFIC CONTROLS AND EROSION CONTROLS.

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

CREATION DATE:	11/8/12
RELEASE DATE:	3/21/16

ISSUED FOR BID & CONSTRUCTION

REVISIONS:

4/3/13	DESIGN REVISIONS
5/16/13	DESIGN REVISIONS
6/3/13	DESIGN REVISIONS
7/30/13	DESIGN REVISIONS
12/30/13	DESIGN REVISIONS
1/15/16	DESIGN REVISIONS
3/21/16	BID & CONSTRUCTION PLANS

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FLOAT BRIDGE RD. PHASE 2 CAUSEWAY

CASTLETON, VERMONT

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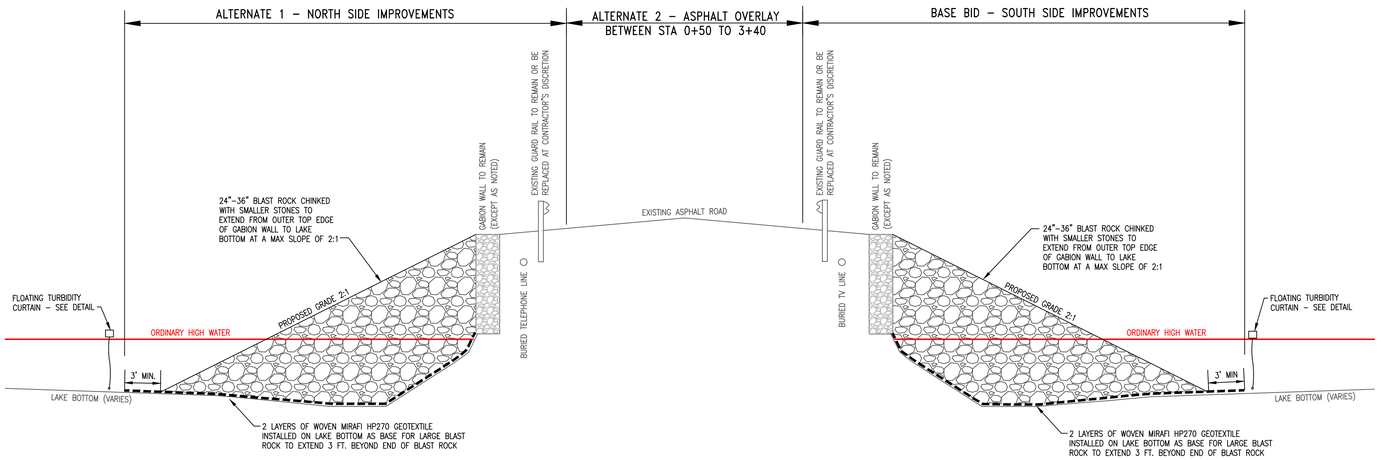
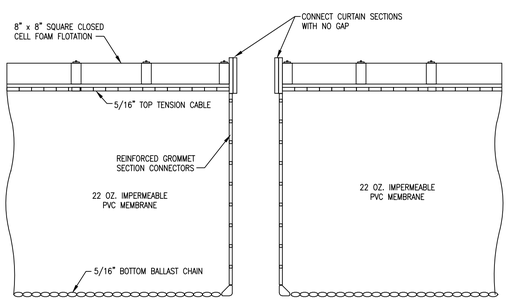
SITE PLAN

SCALE:	AS NOTED
DESIGN BY:	BJE/PMG
DRAWN BY:	KSM
SHEET NO:	C1
PROJECT NO:	1012.06



TYPICAL PROPOSED CROSS SECTION DETAIL

N.T.S

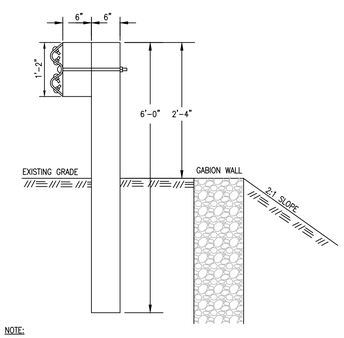


NOTES:

1. CONTRACTOR SHALL INSTALL TYPE 2 TURBIDITY CURTAIN MANUFACTURED BY INDIAN VALLEY INDUSTRIES, OR EQUAL.

TURBIDITY CURTAIN DETAIL

NTS

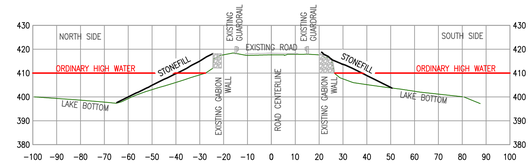


NOTE:

1. INSTALLATION SHALL BE IN CONFORMANCE WITH VTRANS STANDARD DETAIL G-1 AND G-1D.
2. IF GUARDRAIL IS REMOVED, TEMPORARY BARRIERS/GUARDS SHALL BE INSTALLED BY CONTRACTOR.
3. GUARDRAIL SHALL BE INSTALLED IN CURRENT LOCATION.

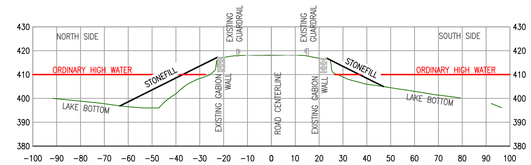
TYPICAL W-BEAM GUARDRAIL REPLACEMENT DETAIL WITH STEEL POSTS

NTS



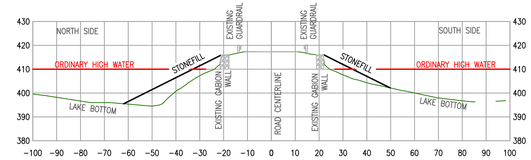
CROSS SECTION 0+50

HORZ SCALE: 1" = 30'
VERT SCALE: 1" = 30'



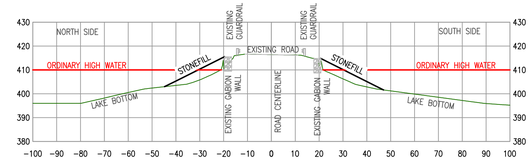
CROSS SECTION 1+00

HORZ SCALE: 1" = 30'
VERT SCALE: 1" = 30'



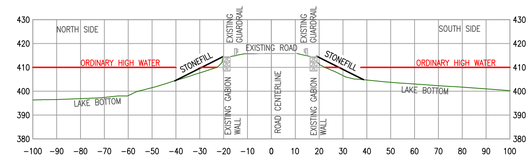
CROSS SECTION 1+50

HORZ SCALE: 1" = 30'
VERT SCALE: 1" = 30'



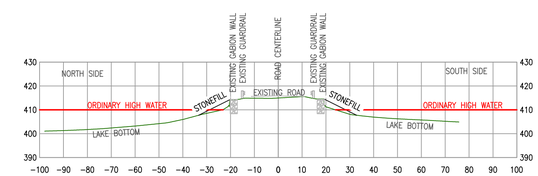
CROSS SECTION 2+00

HORZ SCALE: 1" = 30'
VERT SCALE: 1" = 30'



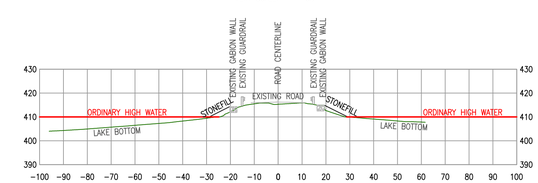
CROSS SECTION 2+50

HORZ SCALE: 1" = 30'
VERT SCALE: 1" = 30'



CROSS SECTION 3+00

HORZ SCALE: 1" = 30'
VERT SCALE: 1" = 30'



CROSS SECTION 3+30

HORZ SCALE: 1" = 30'
VERT SCALE: 1" = 30'

CREATION DATE: 11/08/12

RELEASE DATE: 3/21/16

ISSUED FOR BID & CONSTRUCTION

REVISIONS:

4/3/13	DESIGN REVISIONS
5/16/13	DESIGN REVISIONS
6/3/13	DESIGN REVISIONS
7/30/13	DESIGN REVISIONS
12/30/13	DESIGN REVISIONS
1/15/16	DESIGN REVISIONS
3/21/16	BID & CONSTRUCTION PLANS

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FLOAT BRIDGE RD.
PHASE 2
CAUSEWAY

CASTLETON, VERMONT

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DETAILS

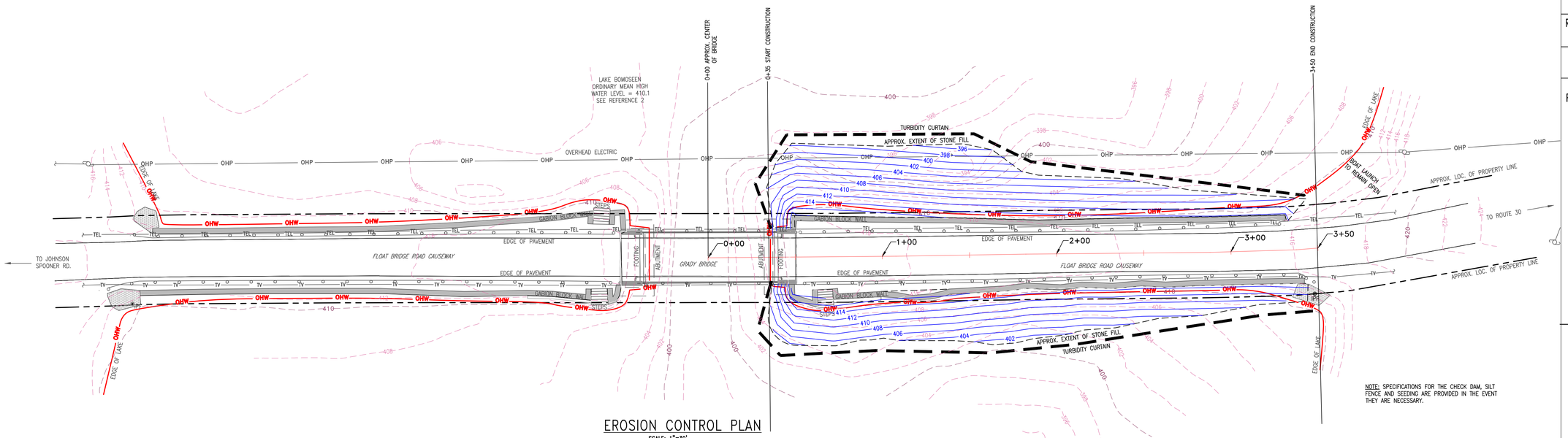
SCALE: AS NOTED

DESIGN BY: BJE/PMG

DRAWN BY: KSM

SHEET NO: C2

PROJECT NO: 1012.06



NOTE: SPECIFICATIONS FOR THE CHECK DAM, SILT FENCE AND SEEDING ARE PROVIDED IN THE EVENT THEY ARE NECESSARY.

EROSION CONTROL PLAN

SCALE: 1"=30'

LEGEND

OHW	ORDINARY HIGH WATER
	APPROX. LOCATION OF PROPERTY LINE
98	EXISTING CONTOUR
100	EXISTING 10' CONTOUR
	EXISTING GUARDRAIL
OHP	EXISTING OVERHEAD POWER
TV	EXISTING TV LINE
TEL	EXISTING TELEPHONE LINE
	EXISTING UTILITY POLE
	TURBIDITY CURTAIN
	APPROX EXTENT OF STONE FILL

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

SEEDING SCHEDULE

MIXTURE	LBS/AC.	LBS/1000 SF
BIRDSFOOT TREFOIL	10	0.23
TALL FESCUE	20	0.46
PERENNIAL RYEGRASS	5	0.15
CREEPING RED FESCUE	20	0.46

TEMPORARY VEGETATIVE COVER

SEASONAL AND/OR FOR STOCKPILES

MIXTURE	LBS/AC.	LBS / 1000 SF
ANNUAL RYEGRASS	10	0.23

GENERAL EROSION CONTROL NOTES

MODERATE RISK PROJECT

- CONTRACTOR SHALL BE THOROUGHLY FAMILIAR WITH REQUIREMENTS OF GP-3-9020 PRIOR TO COMMENCING WITH ANY EARTH DISTURBING ACTIVITIES.
- THIS PROJECT HAS BEEN PERMITTED AS A "MODERATE RISK" PROJECT BASED ON THE RISK EVALUATION FORM APPENDIX A OF THE VERMONT GENERAL PERMIT 3-9020 (2008) FOR STORMWATER RUNOFF FROM CONSTRUCTION SITES. IN ORDER TO MAINTAIN THAT STATUS THE CONTRACTOR(S) MUST FOLLOW THE CRITERIA OUTLINED BY ALL PARTS OF THE RISK EVALUATION. IF THESE CRITERIA CANNOT BE IMPLEMENTED THE CONTRACTOR SHALL CONTACT THE OWNER AND ENGINEER PRIOR TO ANY CONSTRUCTION AND AN INDIVIDUAL RISK PERMIT MAY BE REQUIRED BEFORE CONSTRUCTION MAY COMMENCE.
- THE PLANS CREATED BY ENMAN KESSELRING CONSULTING ENGINEERS, P.C. ARE TO PROVIDE A GUIDELINE FOR THE CONTRACTOR IN IMPLEMENTATION OF EROSION CONTROL MEASURES. THE CONTRACTOR SHALL OBTAIN A COPY OF AND FOLLOW THE VERMONT STANDARDS AND SPECIFICATIONS FOR EROSION PREVENTION AND SEDIMENT CONTROL. THIS DOCUMENT IS AVAILABLE ON THE AGENCY OF NATURAL RESOURCES WEBSITE. THE CONTRACTOR SHALL NOT BE LIMITED TO THE METHODS AND PROCEDURES OUTLINED ON THESE PLANS OR IN THE HANDBOOK. THE CONTRACTOR SHALL EMPLOY ADDITIONAL MEASURES AS SITE CONDITIONS REQUIRE TO PREVENT EROSION AND OFFSITE SEDIMENTATION.
- CONTRACTOR SHALL EMPLOY EROSION PREVENTION AND SEDIMENT CONTROL MEASURES TO HELP PREVENT A DISCHARGE TO THE LAKE.
- CONTRACTOR SHALL ENDEAVOR TO WORK THE PROJECT AREA IN A WAY THAT MINIMIZES THE RISK OF RUNOFF DISCHARGING DIRECTLY INTO THE LAKE. SUMPS OR LOW AREAS SHALL BE INCORPORATED INTO THE PROJECT AREA TO COLLECT RAINFALL RUNOFF RATHER THAN ALLOWING THIS TO DISCHARGE DIRECTLY INTO THE LAKE.
- NO MATERIALS STORAGE SHALL TAKE PLACE ONSITE. AS EXISTING GRAVEL/STONE/SOIL IS EXCAVATED IT SHALL BE TRUCKED OFFSITE AND NEW MATERIAL SHALL BE TRUCKED TO SITE AS NEEDED.

INSPECTION REQUIREMENTS:

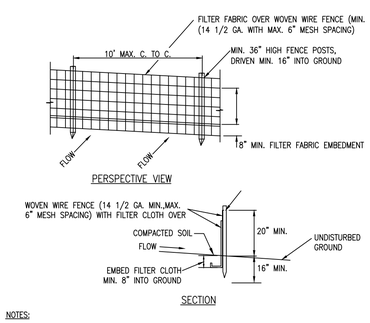
- THE CONTRACTOR SHALL BE THOROUGHLY FAMILIAR WITH CONSTRUCTION GENERAL PERMIT 3-9020 (2008) AND REQUIREMENTS FOR AN INSPECTIONREPORT TO BE COMPLETED B THE ONSITE COORDINATOR OR A PERSON ACTING UNDER THE DIRECTION OF THE ONSITE COORDINATOR AT LEAST ONCE EVERY 7 CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM EVENT RESULTING IN A STORMWATER DISCHARGE FROM THE CONSTRUCTION SITE.
- DURING WINTER CONSTRUCTION (OCT. 15–APR. 15) INSPECTIONS SHALL BE CNDUCTED DAILY DURING ACTIVE EARTHWORK.
- INSPECTIONS MAY BE LIMITED TO TO ONCE PER MONTH IF ALL AREAS OF THE SITE HAVE TEMPORARY OR PERMANENT STABILIZATION. ALL INSPECTION REPORTS SHALL BE RETAINED ONSITE FOR THE DURATION OF THE PROJECT. INSPECTIONS SHALL COVER ALL AREAS OF THE SITE DISTURBED BY CONSTRUCTION ACTIVTIES INCLUDING AREAS OF TEMPORARY STABILIZATION AND ALL DISCHARGE LOCATIONS. INSPECTION REPORTS MUST BE RETAINED WITH THE EPSC PLAN FOR THE DURATION OF THE PROJECT. SEE GENERAL PERMIT 3-9020 (2008) FOR ADDITIONAL DETAIL ON INSPECTION REQUIREMENTS.

WINTER CONSTRUCTION REQUIREMENTS:

- IF CONSTRUCTION ACTIVITIES WILL BE CONDUCTED BETWEEN OCTOBER 15TH AND APRIL 15TH, SPECIAL WINTER EROSION CONTROL MEASURES NEED TO BE IMPLEMENTED. REFER TO LOW RISK HANDBOOK FOR DETAILS.
- THE STORAGE OF CLEARED SNOW UPON DISTURBED SOILS IS PROHIBITED.

PERMIT REQUIREMENTS

- MAXIMUM DISTURBED AREA = 1 ACRES THE PROJECT CONSTRUCTION MAY NOT DISTURB MORE THAN THE TOTAL OF 1 ACRES FOR THE ENTIRE PROJECT.
- MAXIMUM EXPOSED DURATION = 14 DAYS
- MAXIMUM DISTURBED AREA ON SLOPES GREATER THAN 15% = 1 ACRE
- MAXIMUM DISTURBED AREA ON SLOPES GREATER THAN 5% = 1 ACRES
- MAXIMUM EXPOSURE FOLLOWING FINAL GRADING = 48 HOURS
  ALL DISTURBED AREAS TO BE VEGETATED SHALL BE SEEDED (STABILIZED) WITHIN 48 HOURS OF FINAL GRADING AND PRIOR TO SEPTEMBER 15TH TO ALLOW FOR VIGOROUS GROWTH OF VEGETATION. NON VEGETATIVE PROTECTION MEASURES SHALL BE INSTALLED BY OCTOBER 15TH.



NOTES:

1. SILT FENCE SHALL BE INSTALLED RUNNING PARALLEL TO THE CONTOUR, WITH J HOOKS TO TRAP SEDIMENT IN WATER. SILT FENCE SHALL BE INSTALLED AROUND THE DOWNGRADIENT PERIMETER OF EARTH DISTURBANCE AND AROUND ANY SOIL PILES THAT WILL NOT IMMEDIATELY BE REMOVED FROM THE SITE.
2. EACH 100' SECTION OF SILT FENCE CAN INTERCEPT RUNOFF FROM 1/4 ACRE.
3. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POST WITH WIRE TIES OR STAPLES.
4. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
5. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 6" AND FOLDED
6. CONTRACTOR SHALL REMOVE SEDIMENT BEFORE IT REACHES HALFWAY TO THE TOP OF THE FENCE.
7. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN BULGES DEVELOP IN THE SILT FENCE.

MAXIMUM ALLOWABLE SLOPE LENGTHS CONTRIBUTING RUNOFF TO SILT FENCE PLACED ON A SLOPE

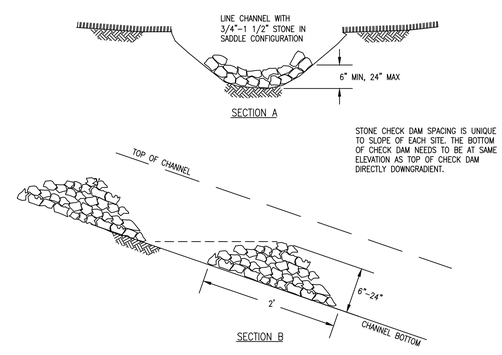
SLOPE STEEPNESS	MAXIMUM LENGTH
2:1	25 FT
3:1	50 FT
4:1	75 FT
5:1 OR FLATTER	100 FT

SILT FENCE DETAIL

NTS

VEGETATION NOTES

1. AT THE COMPLETION OF CONSTRUCTION THE CONTRACTOR SHALL SPREAD 4" OF SCREENED TOPSOIL PRIOR TO APPLYING SEED AT THE RATE SHOWN IN THE TABLE ABOVE.
2. INSTALL BIONET S75-BN BIODEGRADABLE STRAW BLANKET AS MANUFACTURED BY NORTH AMERICAN GREEN ON ALL LOCATIONS THAT ARE TO BE TOPSOILED AND SEEDED.



STONE CHECK DAM

NTS

CREATION DATE: 7/30/13

RELEASE DATE: 3/21/16

ISSUED FOR BID & CONSTRUCTION

REVISIONS:

4/3/13	DESIGN REVISIONS
5/16/13	DESIGN REVISIONS
6/3/13	DESIGN REVISIONS
7/30/13	DESIGN REVISIONS
12/30/13	DESIGN REVISIONS
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FLOAT BRIDGE RD. PHASE 2 CAUSEWAY

CASTLETON, VERMONT

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EROSION CONTROL PLAN

SCALE: AS NOTED

DESIGN BY: BJE/PMG

DRAWN BY: KSM

SHEET NO: C3

PROJECT NO: 1012.06